Digital Value Institute

WHERE SHOULD YOUR BUSINESS BE GOING?

A DIGITAL STRATEGY ROADMAP

PREPARED AND PRESENTED BY

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THE DIGITAL VALUE INSTITUTE
- A CXO THINK-TANK TO FAST-TRACK THE DIGITAL LEARNING CURVE

ESTABLISH A DIGITAL STRATEGY

Psychologists and therapists [without violating patient privacy] document that "digitization" in general and associated "digital technologies" in particular have been a recurring source of executive strategic angst. In sequence C-suites have feared being:

"Kodak-ed" [i.e., failing to jump to the next technological wave];
"Netflix-ed" [i.e., failing to adapt to changing customer buying patterns];
"Amazon-ed" [i.e., having digital competitors render product/services irrelevant];
"TESLA-ed" [i.e., having charismatic outsiders co-opt critical destination points on digital horizon];
"UBER-ed" [i.e., offering sub-par customer experiences]; and most recently
"AI-ed" [i.e., having algorithmic competitors outsmart incumbent offerings]

What do they all have in common? They replace sub-par user experiences with better ones. A digital transformation is using technology to anticipate and improve how you engage customers. It's an ongoing journey, not a destination.

Top barriers to digital transformation are often reported to be:

- Organizational culture is ready for progress, but not change
- Concerns about disrupting the organization's successful business model
- Legacy IT that is complex and costly to change to meet new requirements
- Information is locked down in silos with local ownership
- Autonomous IT departments in different business divisions go in different directions
- A CIO reporting to a CFO puts focus on cost and optimization, not business transformation
- Lack of trust in IT and its ability to support the business

"EVERY Organization, EVERY Executive, EVERY Individual, and EVERY Object is on a digital journey. Sadly, most have no map, no compass and bad shoes."
- Futurist and Digital Value Institute co-founder Thornton May

Organizations need a digital roadmap to provide path clarity [i.e., where have we been, where are we now and where are we going]. The Digital Value Institute is a new think-tank for identifying how technology is transforming industries and how leaders and organizations can respond. The goal is to fast-track the digital learning curve for business transformation and innovation.

- What is the state of play?
- What is keeping us from moving forward?
- What can we learn from visionaries and early adopters?
- Via what process[es] can we best identify value-maximizing options for moving forward?

The institute has, together with the following executives, developed this roadmap for establishing a digital strategy.

Kim Bartley
CMO
White Castle

Paul Gaffney
CTO
Dick's Sporting Goods

Brian Shield
VP IT
Boston Red Sox

John Crooks
IT Division Chair
Mayo Clinic

Tom Murphy
CIO
University of Pennsylvania

Greg Keeling
Director
Bank of Montreal

Wesley Rhodes
COO
Kroger - Sunrise Technologies

Yuri Aguiar
Director of Innovation and Transformation
Ogilvy

Curtis A. Carver
VP & CIO
The University of Alabama at Birmingham

Jane Alexander
Chief Digital Information Officer
The Cleveland Museum of Art

Vince Kellen
CIO
University of California San Diego

Michael A. Coleman
VP & CIO
Electric Power Research Institute

Lisa S. Stanley
CEO
OSCRE International

Louis Steinberg
CTO emeritus
TD Ameritrade

The Institute would like to thank OpenText and ABBYY for their input and recommendations. These companies are in the forefront of digital transformation and have helped the institute develop this roadmap.

Below are our recommended steps for establishing a digital strategy to define where your business should be going.

Yours truly,

Atle Skjekkeland
President, The Digital Value Institute

Thornton A. May
Council Chair, The Digital Value Institute

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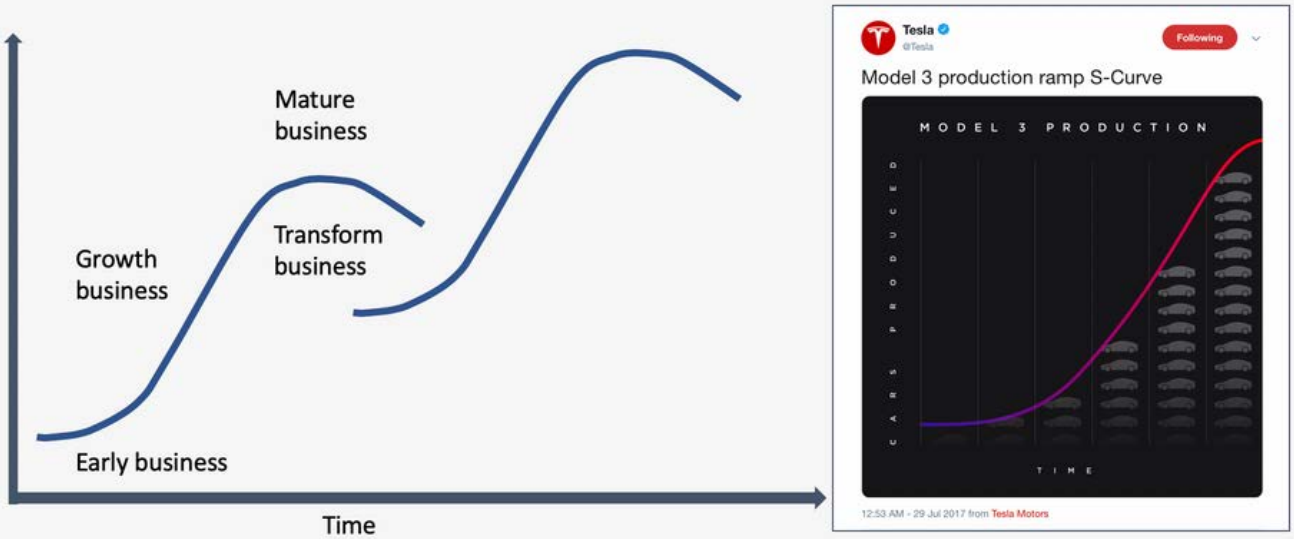
STEP 1: ESTABLISH A DIGITAL FORECAST FOR THE INDUSTRY IN 3, 5, AND 10 YEARS

Every industry has a S-curve representing the maturity of the industry.



Creative destruction is a concept in economics, which since the 1950s, has become most readily identified with the Austrian-American economist Joseph Schumpeter as a theory of economic innovation and the business cycle. According to Schumpeter, the "gale of creative destruction" describes the "process of industrial mutation that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one".

Analysis by the American author, computer scientist, inventor, and futurist Raymond "Ray" Kurzweil shows that technological change is exponential, contrary to the common-sense "intuitive linear" view. We won't experience 10 years of progress in this decade — it will be more like a few hundred years of progress (at today's rate). Expect therefore a new S-curve for your industry.

"At least 40% of all businesses will die in the next 10 years… if they don't figure out how to change their entire company to accommodate new technologies."
- John Chambers, Executive Chairman, Cisco System

Change is constant, but the pace of change is different for different industries. You therefore have to determine if your digital strategy is designed to help you compete on the current S-curve by improving performance and productivity, and/or to disrupt the industry by jumping on a new S-curve with a digital transformation.

"Companies need to decide whether they will be disrupted, manage the disruption or want to lead the disruption. Companies have to decide not if, but what kind of digital existence they want to have – leaders, fast followers, industry adopters, reluctant transformers, hold-out/abstainers."
- Greg Keeling, Director, BMO Financial Group

Foresight professional Daniel Burrus in his book FLASH FORESIGHT (2011) divides probable futures into two useful general categories, hard trends and soft trends.

- A Hard Trend is a projection based on measurable, tangible, and fully predictable facts, events, or objects. It's something that will happen: a future fact that cannot be changed. Strategy based on the certainty of Hard Trends has low risk. Hard Trend categories include Technology, Demographics, and Government Regulations.
- A Soft Trend is a projection based on statistics that have the appearance of being tangible, fully predictable facts. It's something that might happen: a future maybe. Soft Trends can be changed, which means they provide a powerful vehicle to influence the future and can be capitalized on.

Understanding the difference between Hard and Soft Trends allows us to know which parts of the future we can be right about. Hard Trends give us the ability to see disruptions before they happen and the insight we need to create strategies based on a new level of certainty.

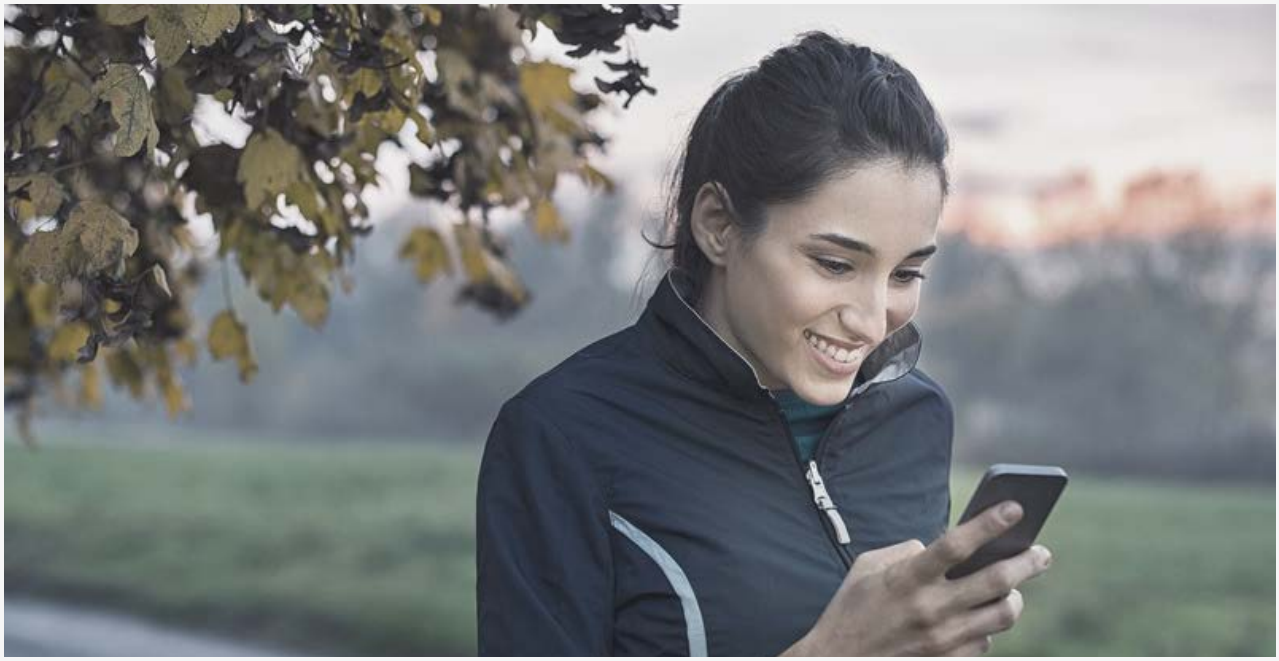
Ask yourself how the following technologies will impact your industry in 3, 5, and 10 years. Distinguish between Hard and Soft Trends.

- Cloud is the IT platform for the future, and when the platform changes, the leaders change. It's not the new technology platform that disrupts you, it's the new business models enabled by the cloud platform.
- Mobile is everywhere, and buyer journeys have multiple mobile moments that need to be supported. Companies building the most effective buyer journeys master four interconnected capabilities according to McKinsey: automation, proactive personalization, contextual interaction, and journey innovation.
- The Internet of Things (IoT) allows you to connect everything. You will then know where everything is at all times, which will allow for more automation (e.g. managing inventory), more insights (e.g. upselling products), better security (e.g. track items at transit or rest), better efficiency (e.g. improve supply chain), and new economic models (e.g. pay for what you use).
- 3D-printing will soon allow you to create what you need, when you need it, and where you need it.
- Artificial Intelligence allows you to use robots and software to automate processes and tasks. Disruption comes from doing things smarter, faster, or cheaper than your competitors. Outsourcing may reduce costs by 1/3, but robots may reduce it by 1/9.
- Big Data and Enterprise Information Management allows you to personalize offerings and services over buyer journey. Use historic and real-time information to anticipate and change buyer behavior.

Task: Develop future user stories outlining how future customers will buy and benefit from products or services based on the above enablers in 3, 5, and 10 years.

Don't make it about your existing offerings, - focus instead on how people and organizations will buy and benefit from products and services in the future.

STEP 2: DETERMINE THE FUTURE DIGITAL PLAY FOR YOUR COMPANY (TO-BE SITUATION)



Organizations have to focus on providing cheap (low-cost) or better (differentiated) products and services according to business strategy guru Michael Porter. Clayton Christensen demonstrated in his book THE INNOVATOR´S DILEMMA (1997) how successful, outstanding companies can do everything "right" and yet still lose their market leadership – or even fail – as new, unexpected competitors rise and take over the market. There are two key parts to this dilemma.

- Value to innovation is a S-curve: Improving a product takes time and many iterations. Define the common foundation and build just enough to support the application that uses it. The first improvements will provide great value, but at some point, the most valuable improvements are complete and the value per iteration is minimal.
- Incumbent sized deals: The incumbent has the luxury of a huge customer set but high expectations of yearly sales. New entry next generation products find niches away from the incumbent customer set to build the new product. The new entry companies do not require the yearly sales of the incumbent and thus have more time to focus and innovate on this smaller venture.

For this reason, the next generation product is usually not being built for the incumbent's customer set. This large customer set is not interested in the new innovation and keeps demanding more innovation with incumbent product. Jumping the S-curve is often seen by many existing customers as a step back.

Best-selling author, speaker, and advisor Geoffrey A. Moore claims that companies have to "free the company´s future from the pull of the past". His book ESCAPE VELOCITY (2011) outline a Hierarchy of Powers model, which calls out five different types in descending order of priority:

- Category Power - where growth comes from participating in widespread adoption of a whole new type of offer
- Company Power- growth from market partners steering extra business your way
- Market Power - growth from being in the hot segments at the right time
- Offer Power- growth from having a superior offer
- Execution Power - growth from taking strategic initiatives beyond the tipping point.

Moore claims there are three "pivot points" around which enterprises can consider transforming themselves when facing direct disruption:

- Technology - they can embrace the new technology itself — a real challenge for any incumbent.
- Customer - they can pivot on their customer base, maintaining their business or brand relationships with them, and transition them to the new technology base via customer loyalty — the way car companies are trying to access the hybrid and electric vehicle markets.
- Management - they can pivot on their management expertise and divest themselves of one category and get into a wholly different one—the way Netflix moved from sending DVDs to streaming.

The four horsemen Amazon, Google, Apple, and Facebook are already established cloud category power houses that may impact your future technology play. If you can´t win against them, then partner with them to ensure a relevant role in the future ecosystem.

A SWOT (Strengths, Weaknesses, Opportunities, Threats) or PESTEL (Political, Economic, Social, Technological, Environmental, Legal) analysis may also help you determine the right play for your organization.

"Great visions paint a clear picture of a better company — one that is better for customers and employees. You need to help people understand why the new vision is better than the old way of working. And you need to help employees understand how they fit in the transition process and the future state. If you've set the stage properly, they may even start suggesting ways to make the vision a reality."
- George Westerman, MIT Sloan School of Management.

Your digital ambition should describe the power-play category (Hierarchy of Power model) and if this is centered around technology, customer, or management.

Task: Establish a vision for how your company will support the future user stories in 3, 5, and 10 year.

STEP 3: IDENTIFY CURRENT DIGITAL ACTIVITIES (AS-IS SITUATION)

The Open ROADS community has developed an open digital maturity model for analyzing the as-is situation. The model has the following elements that should be evaluated:

Strategic Dynamism	Customer Centricity	Digital Culture, Talent & Skills	Innovation & Lean Delivery	Big Data & AI	Technology Leadership
Digital Vision	Brand Vigilance	Digital Culture	On-demand Supply Chain	Data Exploration	Technical Operations
Business Agility	Customer Experience	Organizing Digital Talent	Lean Delivery	Data Engineering	Foundational Technology
Financial and Investment Model	Experience Governance	Continuous Learning	Innovation at Scale	Data Governance	Technology Governance

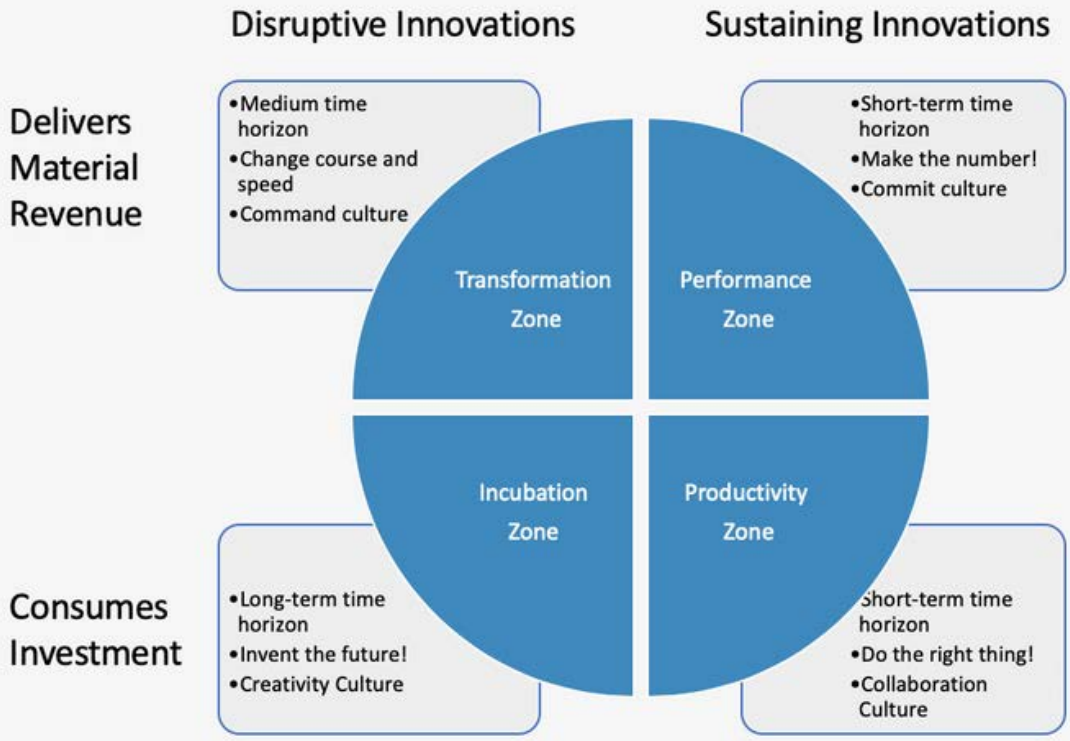
The outcome of this assessment will tell you where you are, and the steps below will tell you where to and how to establish a digital strategy and plan.

Task: Do a digital maturity assessment for the above elements

STEP 4: CREATE A PLAN FOR PROGRESS WITHOUT KNOWING THE ENDGAME (CLOSING THE GAP)

Most companies will not be able to disrupt themselves. Existing customers, technology, and management are too focused on the current way of doing business. Existing customers just want you to provide your product or service better, cheaper, and/or smarter.

Geoffrey A. Moore introduced in his book ZONE TO WIN (2015) a model to manage existing business while at the same time trying to disrupt it.



Moore recommends that a business should have four zones.

- The Performance Zone for improving value propositions and sales on the current S-curve.
- The Productivity Zone for optimizing the margins from the current S-curve. Stay a leader as long as the market is there.
- Incubation Zone for identifying new value offerings on a new S-curve. Run this as a VC-firm with a diversified portfolio and several stages of funding.
- Transformation Zone for introducing new offerings in a new S-curve with separate C-level leadership and KPIs.

IT needs to be a trusted partner in this journey. If there is a gap between the business and IT, then this needs to be addressed before starting a digital transformation.

"Nearly every digital master we studied — from Indian manufacturer Asian Paints to Australian-British mining company Rio Tinto to DBS — invested in a legacy systems cleanup either before or during other waves of transformation. Fixing the legacy platform creates business processes that are leaner and faster than before and generates options to power wave after wave of new digital innovation."
- George Westerman, senior lecturer with the MIT Sloan School of Management

Moore recommends organizations to work their up the following steps:

- Reframing your infrastructure model by leveraging cloud, mobile, social, and AI
- Reframing your operating model to improve customer intimacy and operational efficiency
- Reframing your business model to get net-new revenue

Start by reframing your infrastructure model to establish IT as a partner for business enablement. Once this is done, then work your way up to reframing the operating model and business model.

Reframing the Infrastructure Model

Get the foundation right for improving your business. Here are our recommendations for achieving this:

Improving the Infrastructure	Value
Embrace cloud and mobile	Improve IT security, agility, scalability, and performance
Digitize and automate processes	Improve operational efficiency by automating routine work and augmenting dynamic, creative, and nonroutine work
Leverage IoT and analytics	Better forecast and track inventory; maximize uptime, life, yield, required support, and energy consumption
Establish Information Governance	Improve data and information availability, completeness, and quality with master data, metadata, data governance roles and responsibilities.

As an example, a large logistics provider in Dubai uses ABBYY capture solutions to process up to 100,000 custom documents daily with 3 operators instead of 30. The ABBYY Content IQ platform turn unstructured content into structured, actionable information making digital workers smarter and processes run more efficient.

Another example is the Port of Rotterdam. They are adopting Internet of Things for real-time tracking of containers, determining optimal stacking, shortening customs time, optimizing supply chain, and easing the transition to automated terminals. This will improve port efficiency and help to make Rotterdam the most attractive port compared to its competitors.

Reframing the Operating Model

Below our recommendations for using technology to anticipate and improve how you engage customers.

Improving the operating model	Value
Digitize and connect customer touch points to improve customer experience	Build digital channels and IoT to provide connected experiences. Build your own solutions if this creates a competitive advantage.
Connect data and information across the buyer journey	Determine Master-data, establish an API layer on top of legacy systems, remove local data ownership, and establish KPIs for data and information availability, quality, and completeness
Leverage Big Data and analytics	Conduct historic and real-time data analysis to personalize offerings, optimize price, and provide buying recommendations
Ensure privacy by default and design	Identify and protect personal information across the buyer journey. Let customers control their own data.

"Don't get excited about shipping a feature—get excited about when the feature turns into revenue and turns into profit."
- Paul Gaffney, CTO at Dick´s Sporting Goods

As an example, Royal Caribbean Cruise Line realized that selling cruises without good internet access was like trying to sell a stay in a prison. Mobile therefore became a strategic initiative for them. Their guest app now includes features such as accelerated check-in, the daily planner, onboard accounts, as well as the ability to book various items such as shore excursions, specialty restaurants and other onboard activities. Royal Caribbean Cruise Line is also planning to use mobile facial recognition technology in port to allow guests to skip check-in lines, and allow guests to use their smartphone to help to navigate around a ship's many pathways, unlock cabin doors automatically for the cabin's occupant, track luggage from the time it arrives at the pier until it is delivered to the rooms, leverage AI as a digital assistant, and get drinks delivered to guests wherever they are on the ship.

Another example is The Auto Club Group (ACG). They represents over 9.9 million members and is one of the largest AAA clubs in the national association. The ACG is on a journey of digital transformation towards its 'Connected Member Vision'. Using OpenText Identity and Access Management, ACG will create a single digital member identity across all business units to reduce complexity, increase security, and streamline the digital experience for customers. By securely connecting ecosystems of people, systems and things, ACG believes it can enable new service offerings, optimize operations, develop new business models, and ultimately take advantage of the connected economy business model.

Success will require the CIO to be part of the executive leadership. If the CIO reports to the CFO, then focus is cost reduction and optimization. If the CIO reports to the CEO, the focus is business enablement. Only then will the company succeed with a digital transformation.

Reframing the Business Model

The analyst Gartner recommends organizations to consider the following opportunities for identifying a new business model with net-new revenue:

Connected Revenue	Sell existing digital assets	E.g. selling data and algorithms
	Digitalize product or service	E.g. selling connected machines and services
	Sell metered revenue	E.g. selling on pay-as-you-use basis
	Contract based on shared risk outcome	E.g. price varies based on a shared outcome metric
Platform Revenue	Run a platform business	E.g. a business that has sellers and buyers all working on same platform
New Industry Revenue	Move into adjacent and new industries	E.g. Tesla Powerwall

Task: Create a plan for how to meet your digital ambition for each of the elements in the maturity assessment.

Ted Schadler, VP at Forrester, recommends that organizations focus on the following:

- Pick your targets - start where you have commitment, e.g. one product line, one country. Drive this forward, show success, and lead by example.
- Always take advantage of a good crisis – focus your efforts where you feel threatened.
- Establish Centers of Excellent to figure out what to do – be the accelerant for the rest of the organization.
- Reverse CXO mentoring – if senior executives don´t know what´s possible, hire then digital mentors to guide them

Vince Kellen, CIO at University of California San Diego, creates "Anchor Visuals" to explain plans and architectures – whether they be business or technical – to help explain what is going on in a particular area of digitization. They use this to communicate their plans using the right metaphors and words. Part of that is a visual language, and all of their architectures have Anchor Visuals.

Remember what management guru Peter Drucker once told us: "Culture eats strategy for breakfast, lunch, and dinner". Success is 80% about people, 15% about processes, and 5% about technology.

"You don't have to take everybody on this journey. Find the change agents and focus on these. Give them resources and support. Help them succeed."
- Dion Hinchcliffe, VP at Constellation Research

Pick your targets, focus your efforts, and lead by example. Ensure your plan builds on your digital maturity assessment and covers the infrastructure model, operating model, and business model. Take one risk at the time, and ensure excellent project management and change management.

NEXT STEPS

TASK

Click here for video library

Check out video interviews with Geoffrey A. Moore, Dion Hinchcliffe, Ted Schadler, and Thornton A. May.

Click here to sign up for the in-person event

Join the Digital Value Studio event in St. Augustine November 13-14, 2019

Click here to get help developing a digital strategy

Get help developing a digital strategy for your business.

ABOUT THE AUTHORS:

THORNTON A. MAY
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Thornton May is a futurist, author and educator. At Dartmouth College, Keio University [Tokyo] and the Center for Japanese Studies at the University of Michigan, Thornton studied Japanese technology policies and practices during the Meiji Restoration [1868 through 1912], post-World War II and 1970s. Living in Tokyo Thornton worked at a series of global Japanese companies assisting managing "emerging technology" investments.

Thornton was hired by noted futurist Alvin Toffler [Future Shock, Third Wave, Power Shift and Revolutionary Wealth] to assist the "technology futures" program for Toffler Associates. Toffler Associates designed and delivered the strategic plans for South Korea [President Kim Dae-Jung] and Singapore [Minister of Finance Lew Kuan Yew]. These plans specified the technology investments necessary to sustain economic dominance in the twenty-first century.

Thornton returned to America to lead technology research at the Nolan Norton Institute. His research team is credited for coining the phrase "Chief Information Officer" in 1981. Thornton pioneered the multi-client research program designed to discover strategic and operating insights associated with emerging technologies.

His work as a futurist and anthropologist position him as part Paul Revere [the one to sound the alarm] and part Arnold Toynbee/Edward Gibbon [the one who explains what has happened/what is happening].

Thornton has taught at four major universities, written columns on technology for multiple leading publications [25 plus years at Computerworld], advises major organizations and government agencies on how to think differently about technology, all the while conducting seminal anthropological field research into technology-use behaviors of the various tribes comprising modern society.

Thornton began his career as an anthropologist studying tribal behavior in the modern Japanese corporation. He received a bachelor's degree from Dartmouth College, a master's degree from Carnegie Mellon University, and did post-graduate work in Japanese Studies at the University of Michigan. At five feet, seven inches, he played professional basketball in Japan.

Thornton brings a scholar's patience for empirical research, a second-to-none gift for storytelling and a stand-up comedian's sense of humor to his audiences. His book, The New Know: Innovation Powered by Analytics examines the intersection of the analytic and executive tribes.

The editors at eWeek honored Thornton, including him on their list of 'Top 100 Most Influential People in IT.' The editors at Fast Company labeled him 'one of the top 50 brains in technology today.' Thornton is a founding member of the Internet of Things World Forum.

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Atle is a digital business explorer and evangelist. His interest in the business impact of cloud, social, mobile, IoT, and artificial intelligence has made him a frequent keynoter and workshop facilitator at events across the world.

Atle has a MSc in Economics and Business Administration from the Norwegian School of Economics with a specialization in business strategy and marketing. He has since 1996 spent his career in IT and Information Management, with a focus on how information can be used to add value, reduce costs, manage risks, and/or create new opportunities. This has made him into a leading information management innovator and educator.

From 2004 to 2018, he worked as VP, COO, and SVP at AIIM – a global association for intelligent information management. While at AIIM, he founded the AIIM annual conference, online community, certification, and training programs with over 30,000 students. He also served several years as the General Secretary of the DLM Forum for the European Commission, responsible for creating standards for electronic records management and digital archiving.

Atle led for almost a decade AIIM´s information management think-tank in EMEA and NA with a focus on identifying the future and impact of cloud, mobile, social, AI, etc. He also participated in several task-forces about the future of Enterprise IT with industry experts like Geoffrey Moore [best-selling author of Crossing the Chasm] and Andrew McAfee [best-selling author of Race Against the Machine]. The task-force with Geoffrey Moore introduced the concept Systems of Record vs Systems of Engagement, and a Forbes blogger named this the best social media idea of 2011. While at AIIM, he also developed and delivered custom information management programs for several large organizations like Chevron, European Central Bank, HP, Konica Minolta, and Oracle.

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Using integration, automation, and AI, OpenText connects, synthesizes, and delivers information where it's needed to maximize its value. OpenText offers deployment options, consulting, and integrations for on-premises, hybrid, cloud, and managed services solutions to ease the transition to cloud and help customers leverage existing technology investments. With 13,000 leading experts focused on delivering EIM to 130,000 customers across 40 countries, OpenText understands and addresses the complexity of information flow, so you can:

- Build automation and agility into business processes
- Integrate operations and improve supply-chain efficiency
- Create more engaging customer experiences
- Turn mountains of data into new insights
- Improve content management, information discovery and security
- Detect and respond to digital threats or extract forensics from all your endpoints

OpenText helps customers realize an information advantage with an industry-tailored approach to process, governance, culture, and technology to deliver solutions that address industry-specific trends, business challenges, and regulations.

Learn more about OpenText (NASDAQ/TSX: OTEX) at www.opentext.com

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Skip Prichard´s blog interview with Geoffrey Moore

OpenROADS Community

Daniel Burrus, FLASH FORESIGHT